BILL NO. S-90-07-21

SPECIAL ORDINANCE NO. S-186-90

AN ORDINANCE approving the awarding of Reference #OFLP239 by the City of Fort Wayne, Indiana, by and through its Department of Purchasing and **VOITH HYDRO, INC.** for the Three Rivers Filtration Plant.

NOW, THEREFORE, BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF FORT WAYNE, INDIANA;

SECTION 1. That Reference #OFLP239 between the City of Fort Wayne, by and through its Department of Purchasing and **VOITH HYDRO, INC.** for the Three Rivers Filtration Plant, respectfully for:

> **the services to make necessary repairs and adjustments to the the St. Joe Dam hydro-electric generator to make it operable for the the Three Rivers Filtration Plant;**

involving a total cost of Twenty-Three Thousand and no/100 Dollars ($23,000.00), all as more particularly set forth in said Reference #OFLP239 which is on file in the Office of the Department of Purchasing, and is by reference incorporated herein, made a part hereof, and is hereby in all things ratified, confirmed and approved.

SECTION 2. That this Ordinance shall be in full force and effect from and after its passage and any and all necessary approval by the Mayor.

Councilmember

APPROVED AS TO FORM
AND LEGALITY

J. Timothy McCaulay

J. Timothy McCaulay, City Attorney

REF. NO.:	OFLP239
DEPT.:	FILTRATION PL
DATE:	7/3/90
ITEM/SERV.:	HYDRO-ELECTRIC GENERATOR

PURCHASING INFORMATION

ADVERTISED BID:	
DATES ADVERTISED:	
OPENING DATE:	
WRITTEN QUOTE:	
DUE DATE:	
VERBAL QUOTE:	YES
SINGLE SOURCE:	
NO. OF VENDORS NOTIFIED:	2
NO. OF VENDORS RECEIVING BID:	2
NO. OF VENDORS RETURNING BID:	2
NO. OF VENDORS DISQUALIFIED:	0
NO. OF VENDORS NOT RESPONDING:	0
DATE SENT TO DEPT FOR RECOMM.:	
DATE RECOMMENDATION REC'D IN PURCH:	7/3/90

COUNCIL INFORMATION	DATES SENT	EXTENSION DATES
DATE INFO SENT TO LAW DEPT.:	7/3/90	
INTRODUCTION DATE:	7/10/90	
DISCUSSION DATE:	7/17/90	
PASSAGE DATE:	7/24/90	
ORDINANCE NO.:		

McNAMEE
ENGINEERING EXCELLENCE
SINCE 1914

McNAMEE, PORTER & SEELEY, INC.

3131 South State Street
Ann Arbor, MI 48108
Telephone: (313) 665-6000
Fax: (313) 665-2570

FEB 1990
RECEIVED
THREE RIVERS
FILTRATION
PLANT

3/6/90

February 8, 1990

Go 20,000 with with

Mr. Terry L. Atherton, P.E.
Director of Water Resources
7th Floor, City County Building
One Main Street
Fort Wayne, IN 46801

Re: Fort Wayne, Indiana
St. Joseph Dam and Pumping Station

Dear Mr. Atherton:

This follows our recent telephone conversation regarding repairs to the hydro-electric unit at the pumping station. At your request, we had two specialty companies inspect the hydro-electric turbine and generator in early December 1989. Each company has responded and, as expected for this kind of work, each viewed repair/rehabilitation differently. A copy of each proposal is enclosed.

Both companies are well qualified to do the work. Leitelt Iron Works fabricated the original tainter gates and a few years ago built the gate operators at the St. Joseph dam. Their approach is more conservative and less risky. This approach is also more costly. Their price for building and installing head and tail gates; removal, remanufacture and reassembly of the hydro unit; and new switchgear including Option No. 2 of the Newkirk Electric Associates, Inc., proposal is $221,156.

Voith Electric, Inc., on the other hand, feels that much less work is needed to get the unit operating properly. Their proposal is on a time and materials basis to do a complete inspection of the turbine and generator and make recommendations for restoration as the inspection proceeds. Based on their knowledge of the system from their inspection and subsequent information we passed onto them from one of the plant operators and their knowledge of hydro units, they feel the major problem with the unit is misalignment. They proposed that the inspection be budgeted for $20,000. If what they now suspect to be the problem proves to be valid, they suggested another $12,750 would be necessary to do some machining and parts replacement. Their proposal does not address switchgear replacement.

At risk to the City is $20,000 for a complete inspection of the unit by qualified professionals. If their assessment is correct, repairs can be made and the turbine put back in service for an additional $15,000. Based on the potential value of the electricity generated, this $35,000 cost could be paid for in one year.

Electric switchgear replacement is not particularly a specialty item of work and could be done by several Fort Wayne electrical contractors.

Voith does not require that the river be any lower than it was on the day of their inspection. With current fairly low plant flows, this should not be a burden on plant operations.

It is our recommendation that the Board of Public Works and Safety issue a purchase order to Voith Hydro, Inc., for a maximum of $20,000 to do the inspection work. Any additional work would have to be by separate purchase order after its need has been established and documented by the inspection.

A separate letter outlining McNamee, Porter & Seeley, Inc., services will be provided separately.

Sincerely,
McNamee, Porter & Seeley, Inc.

John P. Oyer, P.E.
Vice President

JPO:dvh
141.13.04

Enclosures

cc: John McLane, w/enclosures

VOITH

Voith Hydro, Inc.

Suite 101
2727 N. Grandview Blvd.
Waukesha, Wisconsin 53188
(414) 544-1921
Telefax (414) 542-5403

January 5, 1990

RECEIVED
JAN 08 1990
McNAMEE, PORTER & SEELEY
BY_____

McNamee, Porter and Steeley, Inc.
3131 South State Street
Ann Arbor, MI 48108

Attention: Mr. Norm Schneyer, P.E.
Electrical Engineer
Subject: Anthony Blvd. Dam

Dear Mr. Schneyer:

Voith Hydro, Inc. is happy to furnish you with budget prices for the Anthony Blvd. Dam. With the new information that you supplied to me on January 3, 1990, Voith Hydro, Inc. will suggest a different approach to the project.

Voith cannot be certain of the condition of the shafts after the stress you told me they were subjected to as a result of attempting to start the unit while on the jacks. The course of action should be based on your confidence of the repairs in 1975. If the generator shaft was not inspected properly, this could cause the problems that you are experiencing. As you know, the generator shaft was subjected to the same stress that necessitated the replacement of the turbine shaft. If you have reason to believe this inspection was not performed, Voith would recommend that the unit be disassembled and all the shafts be sent to our shop for inspection.

Voith Hydro, Inc. does not have all the needed information at this time to quote a price on the replacement of the generator or turbine shaft. We can offer a budget price on the repairs to the shaft. To set up the shaft in our lathe and record with indicators the shaft and flange run-out and cut the flanges with a skin cut to correct the run-out, if needed, will cost approximately $6,750.00.

The additional time to remove the shafts and prepare them for shipment to York, PA should extend the job by two weeks. If it is your choice to send the shafts to our shop, Voith's field personnel will center the stationary part to a center wire. This will allow us to continue the progress at the site during the absence of the shaft.

If the wicket gate bushings are in need of replacement, a budget price of approximately $5,000.00 should cover the cost of the bushings for both the head cover and bottom ring. This price does not cover any machining that may be required.

Sincerely,

Steve Hall

Steve Hall
Regional Service Manager

cc: Grover Wachter

VOITH

Voith Hydro, Inc.

Suite 101
2727 N. Grandview Blvd.
Waukesha, Wisconsin 53188
(414) 544-1921
Telefax (414) 542-5403

April 17, 1990

City Of Fort Wayne
Fort Wayne, Indiana

Attention: John McClean

Subject: Anthony Blvd. Dam

Dear Mr. McClean;

The scope of work on this project has not been defined due to the lack of information to the condition of the unit. In the letter dated December 22, 1989 Voith set the outlines of the needed work as seen by my inspection. The quote of $ 19,210.00 plus expenses was given. In this proposal I listed 11 points to be inspected. The following is a list of the expected jobs and time to perform them.

Job Description	Man Hours.
Set up	8
Clean rotor air gap	8
Clean runner air gap	12
Check bearing clearence	4
Check Thrust Bearing	4
Rotate Unit	6
Record Gen. air gaps	6
Remove guide bearings	12
Set up for alingment	6
Move unit to center	8
Record as found readings	4
Adjustments to Center and alingment	40
Rotate unit	6
Confrim plumb	12
Record Gen. Air gap	8
Record Runner gap	8
Check lube system and clean	20
Install bearings	8
Record bearing	6

Record Vent open on	
wicket gates	16
Adjust as needed	20
de-moblize	4
	226 man hours x 85.00 per hr.

Depending of the condition of the unit some of these jobswill not take the time given and we could find damage that we were not aware of.
Voith recomends that this project to operate on a time and material basis. Voith will bill the City for acutal expenses but for this proposal we anticipate 3,000.00 in expenses and transportation.
We see no reason at this time why the scope of work cannot be completed within this time frame or less.
Voith will perform this project at a time and material basis not to exceeded 23,000.00.

Voith will perform the inspection to determine if any damages exsist that would extend the job, this will be done at the start of the project. At this time we will submitt a report to the City of Fort Wayne. This will allow the City to decide what actions are needed prior to Alignment of the unit.

Voith submitted a proposal on January 5, 1990 to cover the possible delays of the project.

Thank You,

Steve Hall

Steve Hall
Regional Service Manager
Mid-West Region

VOITH

Voith Hydro, Inc.

Suite 101
2727 N. Grandview Blvd.
Waukesha, Wisconsin 53188
(414) 544-1921
Telefax (414) 542-5403

December 22, 1989

McNamee, Porter and Steeley, Inc.
3131 South State Street
Ann Arbor, Mi. 48108

ATTENTION: Mr. Norm Schneyer, P.E.
Electrical Engineer

SUBJECT: Anthony Blvd. Dam

Dear Mr. Schneyer

Voith Hydro, Inc. has extended the validity date on proposal No. 6-38716-J to January 31, 1990. This proposal quoted Voith's prices for the hourly rate of Field Service Representatives.

As a result of my on site visit on November 30, 1989 it is my recommendation that the Anthony Blvd. Project be approached in multible stages. The first stage of the project would be with Voith Hydro Inc. furnishing two Field Representatives, to perform a complete inspection of the Turbine and Generator. Voith's personnel would re-align and center the unit. Our procedure would enable us to locate any problems that may be present, and Voith Hydro Inc. would at that time submit for your approval recommendations to restore the hydrogenerator to a safe and reliable operating condition.

It is my estimation that the first stage of the project will take three weeks with two men. This estimation is based on my inspection of the unit, it is also contingent on no unseen damage.
Voith would give a verbal report within two weeks of starting the project as to the condition of the unit as well as the condition of the auxiliary equipment. When this imformation is obtained, Voith Hyrdo will be able to project with a greater degree of accuracy the completion date. A written report of all recorded measurments will be submited at the completion of the project.

The sccpe of work to be performed will include but not limited to the following activities:
1. Record the air gap of the Generator

2. Record the air gap of the Turbine runner.
3. Record the as found plumb readings.
4. Move Stator to center if needed.
5. Alignment adjustments as needed.
6. Rotate unit to confirm alignment.
7. Confrim proper bearing clearance.
8. Inspection of Auxiliary equipment.
9. Inspection of wicket gate operating mechanism.
10. Adjustment of gate opening if needed.
11. Final report of all recorded measurements.

113 Mhrs
20,000 for 17 days
+ travel days

It is my recommendation that this work be completed prior to any plans to up-date the controls.

Sincerly:

Steve Hall

Steve Hall
Regional Service Manager

cc: Mark Wankus York Pa.
Craig Stienson York Pa.
File

Read the ~~first~~ time in full and on motion by Burns, seconded by Talarico, and duly adopted, read the second time by title and referred to the Committee on City Utilities (and the City Plan Commission for recommendation) and Public Hearing to be held after due legal notice, at the Council Conference ~~Room 128, City-County~~ Building, Fort Wayne, Indiana, on _____, the _____, day of _____, 19____, at _____ o'clock _____.M.,E.S.T.

DATED: 7-10-90

Sandra E. Kennedy
SANDRA E. KENNEDY, CITY CLERK

Read the ~~third~~ time in full and on motion by Burns, seconded by Talarico, and duly adopted, placed on its passage. PASSED ~~LOST~~ by the following vote:

	AYES	NAYS	ABSTAINED	ABSENT
TOTAL VOTES	8			1
BRADBURY	✓			
BURNS	✓			
EDMONDS	✓			
GiaQUINTA	✓			
HENRY	✓			
LONG	✓			
REDD	✓			
SCHMIDT				✓
TALARICO	✓			

DATED: 7-24-90

Sandra E. Kennedy
SANDRA E. KENNEDY, CITY CLERK

Passed and adopted by the Common Council of the City of Fort Wayne, Indiana, as ~~(ANNEXATION)~~ (APPROPRIATION) ~~(GENERAL)~~ (SPECIAL) ~~(ZONING MAP)~~ ORDINANCE ~~RESOLUTION~~ NO. S-186-90 on the 24th day of July, 1990,

Sandra E. Kennedy
ATTEST: SANDRA E. KENNEDY, CITY CLERK

SEAL

Charles S. Redd
PRESIDING OFFICER

Presented by me to the Mayor of the City of Fort Wayne, Indiana, on the 25th day of July, 1990, at the hour of 11:00 o'clock A.M.,E.S.T.

Sandra E. Kennedy
SANDRA E. KENNEDY, CITY CLERK

Approved and signed by me this 27th day of July, 1990, at the hour of 4:30 o'clock P.M.,E.S.T.

PAUL HELMKE, MAYOR

DIGEST SHEET

TITLE OF ORDINANCE: Special

DEPARTMENT REQUESTING ORDINANCE: Purchasing

SYNOPSIS OF ORDINANCE: An ordinance approving the award of Ref. No. OFLP239 for services to make necessary repairs and adjustments to the St Joe Dam hydro-electric generator to make it operable for the Filtration Plant. The cost reflects the lowest and most responsive of two (2) vendors.

S-90-07-21

EFFECT OF PASSAGE: Disassemble, test, align, adjust, inspect shafts, inspect wicket gate bushings to both the head cover and bottom ring re-assemble and align all parts, test and run generator on line.

EFFECT OF NON-PASSAGE: The generator cannot be used and then the City could not realize a potential $41000.00 per year savings on the electric bill.

MONIES INVOLVED: Voith Hydro $23,000.00

PRICE AGREEMENT:

PURCHASE ORDER: Yes

SOURCE OF FUNDING: Filtration Pl 513-523-B101-4363

PRIOR APPROVAL: DATE:
(IF APPLICABLE)

BILL NO. S=90-07-21

REPORT OF THE COMMITTEE ON CITY UTILITIES

PAUL M. BURNS, CHAIRMAN
MARK E. GiaQUINTA, VICE CHAIRMAN
HENRY, LONG, TALARICO

WE, YOUR COMMITTEE ON CITY UTILITIES TO WHOM WAS

REFERRED AN (ORDINANCE) (~~RESOLUTION~~) approving of Reference #0FLP239 by the City of Fort Wayne, Indiana, by and through its Department of Purchasing and VOITH HYDRO, INC. for the Three Rivers Filtration Plant

HAVE HAD SAID (ORDINANCE) (~~RESOLUTION~~) UNDER CONSIDERATION AND BEG LEAVE TO REPORT BACK TO THE COMMON COUNCIL THAT SAID (ORDINANCE) (~~RESOLUTION~~)

DO PASS	DO NOT PASS	ABSTAIN	NO REC

DATED: 7-24-90.

Sandra E. Kennedy
City Clerk